

What is claimed is:

1. A water filtration apparatus, comprising:

a) a primary filter having an inlet, a first discharge for discharging a combination of solids and water, and a primary effluent discharge;

b) an equalization tank having a plurality of inlets and one outlet, said primary effluent discharge being coupled to one of the inlets of said equalization tank;

c) a secondary filter having a plurality of inlets and outlets, one of said inlets of said secondary filter being coupled to said outlet of said equalization tank;

d) a sludge holding tank having a backwash inlet coupled to one of said outlets of said secondary filter and a decant outlet coupled to one of said inlets of said equalization tank;

e) a source of backwash water;

f) a backwash pump having an inlet coupled to said source of backwash water and an outlet coupled to one of said inlets of said secondary filter; and

g) an air blower coupled to one of said inlets of said secondary filter.

2. A water filtration system according to claim 1, wherein:

said primary filter includes an approximately 50-micron screen, and

said secondary filter is one of a carbon filter and a media filter.

3. A water filtration system according to claim 1, wherein:

said equalization tank has a capacity of approximately 9,000 gallons, and

said sludge holding tank has a capacity of approximately 6,000 gallons.

4. A water filtration system according to claim 1, wherein:

said source of backwash water includes a fresh water source.

5. A water filtration system according to claim 1, wherein:

said source of backwash water includes a clear well coupled to one of said outlets of said secondary filter.

6. A water filtration system according to claim 1, further comprising:

h) a first surge tank having an inlet coupled to said outlet of said equalization tank and an outlet coupled to one of said inlets of said secondary filter.

7. A water filtration system according to claim 5, further comprising:

h) a first surge tank having an inlet coupled to said outlet of said equalization tank and an outlet coupled to one of said inlets of said secondary filter; and

i) a second surge tank, said second surge tank having an inlet coupled to one of said outlets of said secondary filter and an outlet coupled to said clear well.

8. A water filtration apparatus, comprising:

a) a primary filter having an inlet, a first discharge for discharging a combination of solids and water, and a primary effluent discharge;

b) a filter sock having an inlet coupled to said first discharge of said primary filter and an outlet coupled to said primary filter inlet via a pump-operated sump;

c) an equalization tank having a plurality of inlets and one outlet, said primary effluent discharge being coupled to one of the inlets of said equalization tank;

d) a first surge tank having an inlet and a plurality of outlets, said inlet of said surge tank being coupled to said outlet of said equalization tank;

e) a secondary filter having an inlet and an outlet, said inlet of said secondary filter being coupled to one of said outlets of said first surge tank; and

f) a plurality of leaching pools having an inlet, said inlet of said leaching pools being coupled to said outlet of said secondary filter.

9. A water filtration system according to claim 8, wherein:

said primary filter includes an approximately 50-micron screen,

said sock filter is an approximately 100-micron filter, and

said secondary filter is one of a carbon filter and a media filter.

10. A water filtration system according to claim 8, wherein:

said equalization tank has a capacity of approximately 9,000 gallons, and

said first surge tank has a capacity of approximately 100 gallons.

11. A water filtration system according to claim 8, further comprising:

g) a second surge tank, said second surge tank having an inlet and an outlet, said inlet of said second surge tank being coupled to said outlet of said secondary filter and said outlet of said surge tank being coupled to said inlet of said plurality of leaching fields.

12. A water filtration apparatus according to claim 11, wherein:  
said second surge tank has a capacity of approximately 100 gallons.

13. A water filtration apparatus according to claim 11, wherein  
said inlet of said plurality of leaching pools comprises a clear well coupled to each of said leaching pools.

14. A water filtration apparatus according to claim 11, further comprising:

h) a polishing filter having an inlet and an outlet, said inlet of said polishing filter being coupled to said outlet of said second surge tank and said outlet of said polishing filter being coupled to said inlet of said plurality of leaching fields.

15. A water filtration apparatus according to claim 14, wherein:  
said polishing filter is an approximately 5-micron filter.

16. A water filtration apparatus according to claim 14, wherein:  
said inlet of said plurality of leaching pools comprises a clear well coupled to each of said leaching pools.